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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,582	12/20/2001	Jeffrey S. Brown	01-241	3276

24319 7590 02/16/2005

LSI LOGIC CORPORATION  
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EXAMINER
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PHAM, LY D

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/028,582

Applicant(s)

BROWN, JEFFREY S.

Examiner

Ly D. Pham

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 12 and 20 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 13-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's Amendment filed November 17, 2004 has been entered. Claims 6 and 16 have been amended.

#### ***Drawings***

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because certain figure drawings have illegible fine prints and labels (see figs. 2 – 4). Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 11, 12, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duesman (US Pat 5,740,111) in view of Albachten, III et al. (US Pat 5,014,247).

Regarding **claims 1, 11, and 20**, Duesman discloses a memory circuit comprising:

a bit cell configured to generate a bit signal (col. 1, lines 10 – 42, 'each memory cell stores a binary digit, bit, information, whose logical state ...');

a sense amplifier configured to generate a reset signal in response to sensing said bit signal (col. 1, line 65 – col. 2, line 5, 'sense amplifier enabled to sense the data on the digit line' and col. 2, lines 59 – 61, '... reset by the sense amplifier enable signal); and

a control circuit (fig. 1, charge pump disablement circuit 12) configured to (i) set a control latch (fig. 2, control latch being the R-S latch) in response to a detection signal (col. 2, lines 55 – 61, '... R-S latch set when the row selection signal occurs...') and (ii) reset said control latch in response to said reset signal (col. 2, lines 55 – 61, '... reset by the amplifier enable signal').

Although Duesman did not clearly teach the control latch (R-S latch) being set while both said detection signal and said reset signal are in an asserted state. The feature is however taught by Albachten, III et al. (fig. 3, R-S latches 58 – 72 '... set over clear when both set and reset are asserted...', col. 4, lines 37 – 47). Therefore, it is considered obvious to one of ordinary skill in the art, at the time the invention was made, to include the latch feature taught by Albachten to the disclosure by Duesman, so that metastable condition is resolved (col. 6, lines 13 – 34).

Regarding **claims 2 and 12**, Duesman also discloses the memory circuit according to claims 1 and 12, further comprising a detection circuit configured to

generate said detection signal in response to detecting a transition of an address signal (fig. 2 shows row selection signal input to the set pin of the R-S latch. Row selection is signal inherent from row address decoder).

### ***Allowable Subject Matter***


5. **Claims 3 – 10 and 13 – 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
7. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D. Pham whose telephone number is 571-272-1793. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly Pham   
February 10, 2005

  
**HOAI HO**  
**PRIMARY EXAMINER**